



**Rules and
Regulations for
the Classification
of Ships, July 2010**

Notice No. 1

Effective Date of Latest
Amendments:

See page 1

Issue date: September 2010

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RULES AND REGULATIONS FOR THE CLASSIFICATION OF SHIPS, *July 2010*

Notice No. 1

This Notice contains amendments within the following Sections of the *Rules and Regulations for the Classification of Ships, July 2010*. The amendments are effective on the dates shown:

Part	Chapter	Section	Effective date
1	3	1, 6	Corrigenda
3	13	7	Corrigenda
4	1	4	Corrigendum
5	9	8	Corrigendum
5	12	2	Corrigendum
5	20	3	Corrigendum
5	23	2	Corrigendum
6	2	1, 10	Corrigenda
7	11	1, 2, 3	1 October 2010
8	2	9, 11	Corrigenda

It will be noted that the amendments also include corrigenda, which are effective from the date of this Notice.

The *Rules and Regulations for the Classification of Ships, July 2010* are to be read in conjunction with this Notice No. 1. The status of the Rules is now:

Rules for Ships
Notice No. 1

Effective date: July 2010
Effective dates: 1 October 2010 & Corrigenda

Part 1, Chapter 3

Periodical Survey Regulations

CORRIGENDA

■ Section 1 General

1.5 Definitions

~~1.5.16 A Corrosion Prevention System is a system designed to prevent or reduce corrosion of metals; such as a coating system, a cathodic protection system or a combination of the above.~~

1.5.16 A Corrosion Prevention System is normally considered a full hard protective coating. This is usually to be an epoxy coating or equivalent. Other systems with the exception of soft and semi-hard coatings, may be considered acceptable as alternatives provided they are applied and properly maintained in compliance with the manufacturer's specification.

■ Section 6 Special Survey – Bulk carriers – Hull requirements

6.7 Thickness measurement

Table 3.6.5 Thickness measurement – Single skin bulk carriers – Shell plating and stiffening, with substantial corrosion

Structural member	Extent of measurement	Pattern of measurement
(1) Bottom and side shell plating	Suspect plate, plus four adjacent plates	5 point pattern for each panel between longitudinals
(2) Bottom/side shell longitudinals	Minimum of three longitudinals in way of suspect areas	3 measurements in line across web and 3 measurements on flange
(3) Side shell frames	Suspect frame and each adjacent	(a) At each end and mid-span: (a) 5 point pattern on both web and flange (b) 5 point pattern within 25 mm of welded attachment to both side shell and hopper sloping plate

Part 3, Chapter 13

Ship Control Systems

CORRIGENDA

■ *Section 7*
Equipment

7.1 General*(Part only shown)***Table 13.7.1 Equipment requirements** *(see continuation)*

Ship type	Service	Required equipment
Ferries	Certain restricted Services, see Pt 1, Ch 2, ~~2.3.8~~ 2.3.9	(2) See Tables 13.7.2 and 13.7.3, using N_C and N_A as appropriate Mass of bower anchor Chain cable length and diameter } N_A = one grade below N_C Stream anchor may be omitted
Ferries	Specified coastal service, see Pt 1, Ch 2, ~~2.3.9~~ 2.3.8	(3) As per item (2), also Anchor chains Where $L < 30$ m, may be replaced with wire ropes of equal minimum breaking strength which should: (a) have a length 1,5 times that for chain cable required by Table 13.7.2 and (b) have a length of Grade U2/U1 chain cable not less than 12,5 m between anchor and wire rope. Where $30 \text{ m} \leq L \leq 40 \text{ m}$ one chain cable may be replaced with wire rope meeting the requirements of $L > 40 \text{ m}$. The other may be replaced with wire rope meeting the requirements of $L < 30 \text{ m}$. Where $40 \text{ m} < L \leq 90 \text{ m}$, both chain cables may be replaced with wire rope of equal minimum breaking strength which should (a) have a length 1,5 times that for chain cable required by Table 13.7.2 and (b) have a minimum mass per unit length of 30% that of Grade U2 chain cable required by Table 13.7.2 and (c) have a length of Grade U2/U1 chain cable not less than 12,5 m between anchor and wire rope.

Part 4, Chapter 1 General Cargo Ships

CORRIGENDUM

■ Section 4 Deck structure

4.2 Deck plating

(Part only shown)

Table 1.4.2 Lower deck plating

Symbols	Location	Minimum thickness, in mm	
		Second deck	Third or platform decks
	(3) In way of the crown or bottom of a tank	$t = 0,004sf \frac{\rho k h_4}{1,025} \sqrt{\frac{\rho k h_4}{1,025}} + K_1$ but not less than 7,5 where $L \geq 90$ m, or 6,5 where $L < 90$ m	

Part 5, Chapter 9 Podded Propulsion Units

CORRIGENDUM

■ Section 8 Control engineering systems

8.2 Monitoring and alarms

(Part only shown)

Table 9.8.1 Specific alarms for pod control systems

Item	Alarm	Note
Motor temperature	High	See Pt 6, Ch 15,1.3 Ch 2,15.1.3

Part 5, Chapter 12

Piping Design Requirements

CORRIGENDUM

■ Section 2

Carbon and low alloy steels

2.1 Carbon and low alloy steel pipes, valves and fittings

2.1.2 Materials for Class III piping systems are to be manufactured and tested in accordance with the requirements of acceptable national specifications. Pipes having forge butt welded longitudinal seams are not to be used for oil fuel systems, for heating coils in oil tanks, or for pressures exceeding 4,0 bar (4,1 kgf/cm²). The manufacturer's certificate will be acceptable and is to be provided for each consignment of material. See ~~Ch 1,3.1.3(b)~~ Ch 1,3.1.3(c) of the Rules for Materials.

Part 5, Chapter 20

Azimuth Thrusters

CORRIGENDUM

■ Section 3

Construction and design

3.1 Materials

3.1.3 Where an ice class notation is included in the class of a ship, additional requirements are applicable as detailed in ~~Chapter 9 Part 8~~ and Pt 3, Ch 9.

Part 5, Chapter 23

Safe Return to Port and Orderly Evacuation and Abandonment in Passenger Ships

CORRIGENDUM

■ Section 2

Safe return to port

2.1 General

2.1.1 Consistent with the requirements of the relevant SOLAS Regulations, this Section provides design criteria for machinery and equipment described in 1.1.2 to remain operational for the ship's safe return to port under its own propulsion, in the event of:

- (a) a fire casualty that does not exceed the casualty threshold;
or
- (b) flooding of any single watertight compartment/.

Part 6, Chapter 2

Electrical Engineering

CORRIGENDA

■ Section 1 General requirements

1.17 Programmable electronic systems

1.17.2 Where ~~1.16.1~~ 1.17.1 applies, proposed modifications to software and acceptance testing and trials are to be in accordance with Ch 1, 1.4 and Section 7 as applicable.

■ Section 10 Electric cables and busbar trunking systems (busways)

10.13 Non-metallic cable support systems, protective casings and fixings

10.13.1 Where it is proposed to use non-metallic cable support systems, protective casings or fixings, the additional requirements of this sub-Section apply. For high voltage installations, metallic protective casings are required where ~~10.8.12(b)~~ 10.8.14(b) applies.

Part 7, Chapter 11

Arrangements and Equipment for Environmental Protection

Effective date 1 October 2010

■ Section 1 General requirements

1.3 Information to be submitted

(Part only shown)

1.3.3 Certificates:

- (c) Engine International Air Pollution Prevention (EIAPP) Certificate or statement of compliance with the NOx emission requirements of MARPOL Annex VI for each engine.

■ Section 2 Environmental Protection (EP) class notation

2.8 Oil pollution prevention

2.8.4 The loading or discharge connections and vent pipes/overflows associated with oil fuels, lubricating oils, hydraulic oils and other oils are to be fitted with drip trays. Drip trays fitted to loading or discharge connections are to be fitted with closed drainage systems except on tankers where alternative arrangements will be considered.

2.8.11 For ships delivered after 1 August 2010, all oil fuel tanks with a capacity of greater than 60 m³, except overflow tanks, are to be located in a protected location away from the ship's side or bottom shell plating. The location of tanks is to be in accordance with the requirements relating to oil fuel tank protection given in MARPOL Annex I, Regulation 12A.

2.14 VOC management

2.14.1 Tankers carrying crude oil, ~~petroleum products or chemicals having a flash point not exceeding 60°C (closed cup test)~~ are required to develop and effectively implement a vapour management plan which is to be agreed with LR.

■ Section 3 Supplementary characters

3.11 Protected oil tanks – P character

3.11.3 Main engine lubricating oil drain tanks and fuel overflow tanks are excluded.

Part 8, Chapter 2

Ice Operations – Ice Class

CORRIGENDA

- *Section 9*
Machinery requirements for first-year ice conditions – Ice Classes 1AS FS(+), 1A FS(+), 1B FS(+)
and 1C FS(+)

9.1 Powering of ice strengthened ships

(Part only shown)

9.1.3 The shaft power necessary to provide an ice-breaking capability can be determined by the equation:

$$P_1 = 0,736C_1 C_2 C_3 C_4 \left[240Bh (1 + h + 0,035v^2) + 70S_c \sqrt{L} \right] \text{ kW}$$

- *Section 11*
Machinery strengthening requirements for navigation in multi-year ice conditions – Ice Classes PC1, PC2, PC3, PC4, PC5, PC6 and PC7

11.13 Design loads on propulsion line – Blade failure load for both open and nozzle propellers

11.13.1 The force is acting at 0,8R in the weakest direction of the blade and at a spindle arm of 2/3 of the distance of axis of blade rotation of leading and trailing edge whichever is the greatest. The blade failure load is to be taken as:

$$F_{\text{ex}} = \frac{0,3c t^2 \sigma_{\text{ref}}}{0,8D - 2r} \times 10^{-3} \text{ kN}$$

where

$\sigma_{\text{ref}} = 0,6\sigma_{0,2} + 0,4\sigma_u$
 $\sigma_{0,2}$ and σ_u = representative values for the blade material
 c , t and r = the actual chord length, thickness and radius of the cylindrical root section of the blade at the weakest section outside root fillet and typically will be at the termination of the fillet into the blade profile.

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